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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,043	10/02/2003	Ivan Muri	40424-191088 RK	6930
26694	7590	12/15/2004	EXAMINER	
VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			HUYNH, LOUIS K	
			ART UNIT	PAPER NUMBER

3721

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,043

Applicant(s)

MURI ET AL.

Examiner

Louis K. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/2/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

2. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 10 and 11 are rejected under 35 U.S.C. 101 because the claims are directed to neither a "process" nor a "machine" but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 13-14: "the first and second support elements being arranged to act on the front end and the back end of the stack bundle, respectively" is not true because the first support element only act on the front end of the "signature stack" that is formed from the scaled flow of signatures. Perhaps the above phrase should be changed to: -- the first and second support elements being arranged to act on a front end of the signature stack and the back end of the stack bundle, respectively--.

Claim 10 is indefinite because the claim does not have any process steps of utilizing the arrangement of claim 1; thus the scope of the claim is unclear.

Claim 11 is indefinite because the claim does not have any process steps of utilizing the arrangement of claim 1; thus the scope of the claim is unclear.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4-8, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bluemle (US 5,393,196) in view of Belden (US 4,824,093).

With respect to Claim 1, Bluemle discloses an arrangement for forming stack bundles of signatures including: a horizontal extending stack deposit support (7); a conveyor (4)

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continuously supplying signatures (3) onto the horizontal extending stack deposit support (7) for forming a signature stack (10); a multi-part supporting device comprising a first (8), second (13) and third (12) support elements that are arranged to form a stack bundle (11) by engaging the signature stack (10) from below the stack deposit support (7); wherein the first support element (8) acts on a front end of the signature stack (10), the second support element (13) acts on a back end of the stack bundle (11) and the third support element (12) acts on a front end of the stack bundle (11); and a packaging station (14). The arrangement of Bluemle meets all of applicant's claimed subject matter but lacks the specific teaching of the packaging station including a compressing machine and a bundle strapping machine.

Belden discloses known method for packaging bundles of signatures and a machine (10) for handling signatures including a compressing machine (21) for compressing a loose bundle (13) of the signatures after the bundle (13) has been separated and transferred from a flow of signatures (11), and a conventional strapping machine located at a stop end (160) of the machine (10) for securing the compressed bundle (13) with a strap (15).

It would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have modified the arrangement of Bluemle by having provided the packaging station (14) with a compressing machine and a strapping machine, as taught by Belden, in order to package the stack bundle of signatures formed by the arrangement of Bluemle.

With respect to Claim 4, the compressing machine (21) of Belden includes a first (106) and a second (160) compressing components that transfer the bundle (13) to the strapping machine for strapping the compressed bundle (13) with the strap (15) extending in the advancing

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direction of the bundle; therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have included the first and second compressing components, as taught by Belden, in modifying the arrangement of Bluemle so that the stack bundle can be compressed between the compressing components.

With respect to Claim 5, the modified arrangement of Bluemle would have included a guide (30) extending parallel to the stack deposit support (7), and the first (8), second (13) and third (12) support elements are arranged to adjustably move on the guide (30).

With respect to Claims 6 and 8, Belden further discloses an end-plate feeding mechanism (board drop assembly 22) located between the compressing components (106 and 160) for supplying end plates (14) at the front and back ends of the bundle (13) in order to reinforce the bundle (col. 9, line 56 – col. 10, line 7). Therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have provided such end-plate feeding mechanism of Belden to the modified arrangement of Bluemle so as to supply end plates to the front and back of the stack bundle such that the stack bundle is reinforced with the end plates.

With respect to Claim 7, the second (13) and third (12) support elements in the modified arrangement of Bluemle form a gap for transporting the stack bundle (11) therebetween.

Regarding the limitation of an end plate being transported in the gap for acting on the front end of the stack bundle, Belden teaches that the bundle (13) of signatures (11) are reinforced with end plates (14); therefore it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have included such end plates in the front end and the back end of the stack bundle, as taught by Belden, in order to reinforce and to protect the stack bundle

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during transporting of the stack bundle with the gap formed by the second and third support elements.

With respect to Claims 10 and 11, the modified arrangement of Bluemle is utilized for forming a stack bundle (11) from a continuously supplied and vertically arranged signatures (10).

With respect to Claims 12 and 13, the modified arrangement of Bluemle would include a guide (30) extending parallel to the stack deposit support (7) and the second (13) and third (12) support elements would move on the guide (30) and act on the front and back ends of the stack bundle to transport the stack bundle to a transfer position where the stack bundle would be picked up by the first compressing component.

With respect to Claim 14, Belden further discloses an end-plate feeding mechanism (board drop assembly 22) located between the compressing components (106 and 160) for supplying end plates (14) at the front and back ends of the bundle (13) in order to reinforce the bundle (col. 9, line 56 – col. 10, line 7). Therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have provided such end-plate feeding mechanism of Belden to the modified arrangement of Bluemle so as to supply end plates to the front and back of the stack bundle such that the stack bundle is reinforced with the end plates.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bluemle (US 5,393,196) in view of Belden (US 4,824,093) as applied to claim 1 above; and further in view of Arendes et al. (US 5,358,232).

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The modified arrangement of Bluemle in view of Belden meets all of applicant's claimed subject matter but lacks the specific teaching of the third support element being arranged to move independently from the first and second support elements.

However, Arendes discloses a device for producing stacks of signatures wherein supports elements (7, 13, 16, 17, 22-25) are arranged to move independently from one another (Figs. 3a-3h) to efficiently form a stack of signatures (1) from a continuous flow of signatures.

Therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have further modified the arrangement of Bluemle by having arranged the support elements to move independently from each other, as taught by Arendes, so that the support elements move along a fixed guide thus reducing moving parts.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bluemle (US 5,393,196) in view of Belden (US 4,824,093) as applied to claim 1 above; and further in view of AAPA (Applicant Admitted Prior Art).

The modified arrangement of Bluemle in view of Belden meets all of applicant's claimed subject matter but lacks the specific teaching of a separating device assigned to the first and second support elements for forming a gap between the signatures so that the first and second support elements can be jointly raised into the separating gap.

However, AAPA acknowledges that such separating device is well known in the art (specification at page 10, lines 2-13). Therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have further modified the arrangement of Bluemle by having provided such well known separating device, as

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acknowledged by AAPA, in order to separate the signature stack so that the first and second support can jointly raised into the separating gap.

Conclusion

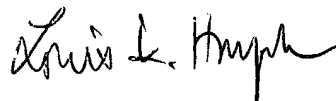
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure has been cited on form PTO-892 along with the applied prior art.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is (571) 272-4462.

The examiner can normally be reached on M-F from 9:30AM to 5:00PM.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Louis K. Huynh
Primary Examiner
Art Unit 3721

December 08, 2004